Executive Summary
Santa Rosa Plain Groundwater Management Plan

Introduction

The Santa Rosa Plain Watershed is a distinctive, ecologically and economically important hydrologic area of Northern California. The watershed encompasses the largest urban area in the north coast region of California, world-class agricultural lands, internationally recognized wetlands, ecosystems, and other natural and recreational resources. Many of its finest attributes and assets are directly related to its water resources, which includes strong reliance on groundwater to meet rural domestic, agricultural and urban demands. Trends in water use, land use, population growth, and climate change indicate that the region's water resources will come under increasing stress in the future, requiring careful and thoughtful monitoring and management.

The Santa Rosa Plain Groundwater Management Plan (Plan) was developed through the collaborative and cooperative effort of a broadly based, 30-member *Basin Advisory Panel*. The Panel includes diverse stakeholders who live or work in the Santa Rosa Plain Watershed. The Plan is intended to inform and guide local decisions about groundwater management in the Santa Rosa Plain Watershed (Figure ES-1). Its purpose is to proactively coordinate public and private groundwater management efforts and leverage funding opportunities to maintain a sustainable, locally-managed, high-quality groundwater resource for current and future users, while sustaining natural groundwater and surface water functions.

Figure ES-1 – Santa Rosa Plain Groundwater Management Plan Area, Local Jurisdictions and Location.

What is Groundwater Management? A groundwater management plan provides the overarching strategy for managing groundwater resources within a groundwater basin. To accomplish this, the plan integrates activities that affect the balance between groundwater inflows and outflows within a basin. Groundwater monitoring and management can prevent or mitigate common problems such as declining or dry wells, salt-water intrusion into fresh water, falling ground surface elevations (land subsidence), reduced water flows in creeks and streams, and a loss of water supply flexibility. In the absence of groundwater management, these problems are more likely to lead to legal conflict or regulatory solutions. An effective groundwater management plan integrates groundwater and surface water protection and management with conservation, reuse and enhanced recharge strategies to increase water supply reliability and sustainability.

Summary of Santa Rosa Plain Groundwater Studies and Key Results

The United States Geological Survey (USGS) has completed a study of the Santa Rosa Plain groundwater basin in collaboration with the Sonoma County Water Agency (Water Agency), the cities of Cotati, Rohnert Park, Santa Rosa and Sebastopol, the town of Windsor, the County of Sonoma, and the California American Water Company. As part of this study, the USGS developed an innovative computer model that fully integrates surface water and groundwater to better understand and manage the Santa Rosa Plain's water resources. The study shows that increased groundwater pumping has caused an imbalance of groundwater

inflow and outflow. This imbalance could affect wells, and eventually will likely reduce flows in creeks and streams, leading to a potential for decline in habitat and ecosystems.

Groundwater pumping by public water suppliers in the Plan Area (e.g. Water Agency and cities) generally increased until 2001 but subsequently declined. Rural pumping for residences and agricultural water supply accounted for the majority of groundwater withdrawals, and both have increased over the 1976-2010 study period. The USGS model shows decreased groundwater levels in response to pumping, which reduced groundwater contribution to stream flow, groundwater uptake by plants (known as *evapotranspiration*), and groundwater storage.

The model also simulates the effects of several potential climate change scenarios on surface water flows and groundwater supplies. The results indicate a potential for:

- Overall lowering of groundwater levels compared to historic baseline conditions.
- Reduced groundwater contribution to stream flow (also known as *baseflow*).
- Reduced groundwater evapotranspiration in riparian areas and reduced groundwater flow to wetlands and springs.
- More infiltration of surface water (stream flow) to groundwater, further reducing stream baseflow.

Groundwater Management Authority and Lead Agency

The Plan has been prepared under the authority of the California Water Code (§ 10750 – 10756). The Water Code encourages local public agencies to work cooperatively with community stakeholders who have an interest in groundwater resources on voluntary planning for groundwater management and local implementation. Adopting a voluntary groundwater management plan makes the Santa Rosa Plain eligible for state funding of groundwater management and other water-related projects and initiatives.

The groundwater management planning process formally started when the Water Agency convened the Santa Rosa Plain Basin Advisory Panel (Panel) in December 2012. The 30-member Panel represents a wide variety of stakeholder interests including governmental (municipal and tribal), business, environmental, and agricultural interests, as well as rural residential well owners. The Panel formed a Technical Advisory Committee (TAC) to provide expert advice and peer review on scientific and technical matters related to Plan development and program implementation. The TAC includes experts from diverse backgrounds and disciplines, including geology, hydrology, engineering and ecology.

The Water Code requires that every groundwater management plan identify one public agency as the "lead agency" with overall responsibility for plan implementation. The Panel selected the Water Agency as the lead agency for the Santa Rosa Plain Groundwater Management Plan. The Water Agency is a special district that provides wholesale water supply within Sonoma and Marin Counties. In the Plan Area, the Water Agency provides wholesale water to the Cities of Cotati, Rohnert Park, and Santa Rosa, the Town of Windsor and to the California American Water Company. The Agency's water supply comes primarily from the Russian River, which is outside the Plan Area.

While the Water Agency is the lead agency, the Basin Advisory Panel (Figure ES-2) — including its member agencies and organizations—plays a fundamental role in Plan implementation and future amendments to the Plan (if any). The Panel has guided

development of this Plan and must approve the Plan prior to its adoption by the lead agency. Neither the Plan, nor any future amendments, can go forward to the lead ageny until Panel members have approved the Plan using the Panel's collaborative and consensus-based decision-making process.

Figure ES-2 – Groundwater Management Plan Implementation Organization Chart.

Plan Setting and Population

The Santa Rosa Plain Watershed Plan Area is located within Sonoma County, California, north of San Francisco Bay (Figure ES-1). The Santa Rosa Plain Watershed contains the low-lying Santa Rosa Plain groundwater subbasin, and portions of other subbasins, surrounded by upland areas that drain into the Santa Rosa Plain groundwater subbasin. The Plan Area's population centers include the cities of Santa Rosa, Rohnert Park, Cotati, Sebastopol, and the Town of Windsor.

Land Use

Historically, the Plan Area and surrounding mountains contained a mostly rural population, with agriculture as the main developed land use. By 2010, the Plan Area population had reached approximately 373,000, comprising about 249,000 people concentrated in the five main urban areas, and approximately 124,000 residents in the unincorporated area (primarily rural). The main urban and residential areas and their populations and economies grew rapidly between 1974 and 1999, with the highest population growth in the early 1980s. The overall Santa Rosa Plain population, including unincorporated areas, grew by 29 percent between 1990 and 2000, slowing to just over 5 percent between 2000 and 2010.

Significant land use changes have modified the landscape of the Plan Area, beginning with its earliest non-native settlers. Most recent primary land use trends have included urbanizing crop and pasture land and upland forests, and increased grassland conversion to vineyards. Irrigated agriculture covered 7,298 acres in 1974 and 19,040 acres in 1999, an increase of 11,742 acres (+160 percent). Converting grassland to irrigated agriculture and urban land uses has increased both the rate and total amount of stormwater runoff. These effects tend to increase the "flashiness" (rapid rise and fall) of streamflow, thereby decreasing groundwater recharge potential.

Figure ES-3 - Land Use in the Plan Area.

Water Use

Urban communities within the Plan Area rely on a combination of surface water imported from the Russian River and local groundwater. Most municipal (city) water users depend on imported Russian River water, supplemented by local groundwater. Smaller public supply systems and rural residential and agricultural water users rely primarily on groundwater. Other local sources of water include surface water from local streams and treated recycled water for irrigation.

The Water Agency is the largest urban water supplier within the Plan Area, delivering wholesale water to contracting cities and water districts in Sonoma and Marin counties. The Water Agency's primary water source (typically around 95%) is the Russian River. This water is imported from outside the Plan Area and piped to retail customers by the

contracting cities and water districts. Groundwater, drawn from three Water Agency wells in the Santa Rosa Plain groundwater subbasin, is a supplemental supply source. The Water Agency's contractors within the Plan Area (Cities of Cotati, Rohnert Park, Santa Rosa, Town of Windsor, and the California American Water Company) also use or intend to use local groundwater to varying degrees for supplementing Water Agency deliveries. The City of Sebastopol relies solely on groundwater produced from wells within its City boundaries.

Small water systems supply water for a wide variety of uses, including rural businesses, residences and schools, mobile home parks, and small-unincorporated communities. Mutual water companies or other private entities own most of the water systems, although a few are operated by special districts. Approximately 26 mutual water companies in the Plan Area provide water to an estimated 2010 population of 3,900. Most of the mutual water companies rely solely on groundwater to meet demands.

Water for agricultural irrigation and rural residences in the Plan Area is primarily drawn from local groundwater. Pumping volumes from these private domestic and agricultural wells is not reported, and can only be estimated. Total rural pumpage in the Plan Area is estimated at 82 percent of the total pumpage on average since 1975, and rural domestic and agricultural pumpage is estimated at 50 and 32 percent, respectively.

USGS Conceptual Model of Surface Water and Groundwater Movement

The United States Geological Survey (USGS) has developed a hydrologic conceptual model of the Santa Rosa Plain Watershed (Figure ES-4). The conceptual model is an interpretation of water movement in a watershed, including the physical processes and mechanisms, boundary conditions, hydrogeologic framework, surface water and groundwater inflows, lateral and vertical groundwater movement, and outflows. The conceptual model also shows surface water and groundwater interconnections. This hydrologic conceptual model is the basis for a computer model that simulates surface water and groundwater flows and interactions.

Figure ES-4 - Conceptual Model of Surface Water and Groundwater Movement.

Much of the Plan Area boundary is a no-flow boundary, meaning that horizontal groundwater flow areas across the boundary are limited by relatively impermeable bedrock or hydrologic divides. Along some parts of the Plan Area boundary, however, groundwater flows relatively freely to and from the adjoining area. Figure ES-4 shows both Plan Area no-flow and flow boundaries as presently defined. The position and character of groundwater flow boundaries can vary as groundwater levels change over time.

The aquifer system contains both shallow and deeper groundwater-storing aquifers. The aquifer system sits above low permeability bedrock, which inhibits downward groundwater flow. The aquifer system's upper boundary is the land surface, including plant canopies. Rainfall, irrigation and surface water all recharge the aquifer from the surface. Outflows from the aquifer include groundwater pumping, evapotranspiration (plant uptake) and discharges to surface water including springs, wetlands, ponds and lakes, or rivers and streams. Faults in the Plan Area are major geologic features (Figure ES-4), with some fault segments acting as barriers to groundwater flow and others creating conduits for upward groundwater flow.

The Plan Area contains four principal water-bearing aquifer units (aquifers): Glen Ellen Formation, Wilson Grove Formation, Petaluma Formation, and Sonoma Volcanics. Each of the units has distinct aquifer properties that control how groundwater moves through them, such as zones of sands and gravels, or broken volcanic zones, that are porous and permeable enough to hold and convey substantial water volumes.

Rainfall is the main source of water inflow and groundwater recharge in the Plan Area. Average annual rainfall is approximately 40 inches, amounting to more than 560,000 acre-feet per year distributed across the entire 167,400 acre Plan Area. Precipitation is greatest (42 to 57 inches per year) in the Mayacamas and Sonoma Mountains on the east side of the Plan Area, and lowest (averaging 30 inches per year) in the central lowlands.

Mark West Creek, Santa Rosa Creek and Matanzas Creek are the major streams that drain the Plan Area, flowing generally from east to west. All these streams originate in the Mayacamas Mountains and have spring-fed flows, so they flow year-round (perennially) through much of the higher elevations. The Laguna de Santa Rosa originates in the southern Plan Area, and is perennial along most of its course.

Groundwater generally flows from both the east and west sides of the Plan Area towards the Laguna de Santa Rosa, along the western edge of the Santa Rosa Plain. As groundwater moves from east to west, dissolved salt and mineral concentrations tend to increase due to interaction with the native rock and human inputs, including septic tank discharges and agricultural irrigation. Vertical groundwater movement and recharge in the central Plan Area appear limited by low permeability clay in the Glen Ellen and Petaluma Formations. The low permeability clay deposits also confine deeper aquifers.

Groundwater exits the Plan Area through wells, discharge to the Laguna de Santa Rosa, or as subsurface flow to some adjoining basins. In addition, surface outflows include evapotranspiration (plant uptake) and streams, mostly as discharges from Mark West Creek to the Russian River drainage, estimated at approximately 192,000 acre-feet per year. Outflows also include wastewater exports to The Geysers, a geothermal power generation complex in Northern Sonoma County.

Groundwater Model and Water Budget

The USGS has developed a state-of-the-art computer model for the Santa Rosa Plain Watershed area that couples surface water with groundwater flows. The model, called GSFLOW, is a tool for simulating different future water supply scenarios, as land uses and climate conditions change, to improve water supply planning and management. The model's watershed component simulates rainfall and surface flow used by vegetation, and water moving through the soil zone into groundwater. The model's groundwater component simulates the flow of groundwater under the soil zone and its connection to surface water flow in streams. In combination, the two model components estimate the overall surface water and groundwater water budget for the Plan Area, and suggest how climate changes may affect surface water and groundwater flows as well as future water uses.

The model simulated an average groundwater budget for the Plan Area from 1976 to 2010. Like a household budget, a groundwater budget shows the amounts and sources of groundwater coming into the Plan Area (known as *inflow* or *recharge*) and leaving the Plan Area (known as *outflow* or *discharge*). Most importantly, the budget shows the balance

between inflows and outflows. The model results indicate the following for the 1976 to 2010 study period:

- Rainfall percolation and streambed infiltration together recharged an estimated 73,000 acre-feet per year of groundwater, accounting for over 90 percent of total groundwater inflow on average.
- Overall, streams are a net source of groundwater recharge. That is, over the entire watershed, more surface water was lost to groundwater (known as a *losing stream reach)* than was gained by groundwater flowing into streams (known as a *gaining stream*).
- Groundwater pumping increased from a long-term average of 36,000 acre-feet per year (1976-2010) to an estimated 42,000 acre-feet per year between 2004 and 2010. The increase is mainly attributed to increased rural pumping.
- From 1976 to 2010, 120,000 acre-feet were lost from overall groundwater storage, or an average of roughly 3,400 acre-feet per year.

Thus, increased rural pumping has reduced the total amount of groundwater in storage across the Plan Area, and groundwater levels have declined slightly — although the estimated storage loss is only a small percentage of both total groundwater storage and the long-term average recharge rate. However, because groundwater helps support stream flows, even slight declines in groundwater levels may result in decreased stream flows overall, with associated ecosystems and habitat decline.

The model also examined the potential impacts of four climate change scenarios on the Plan Area, including the effects of two different global climate change models, combined with both higher and lower greenhouse gas emission scenarios. General results of all four climate change simulations include an overall lowering of groundwater levels, reduced groundwater discharge to streams (reduced baseflow), reduced plant uptake of groundwater (evapotranspiration) and reduced groundwater discharge to wetlands and springs. Declining groundwater levels also result in additional losing stream reaches, further reducing streamflow as larger surface water volumes sink into the ground.

Current Management & Planning Efforts

Current groundwater resource management and planning efforts within the Plan Area are conducted by various local, state and federal agencies, as well as individual organizations and stakeholder groups. These efforts include regulatory and non-regulatory planning, management and monitoring. The Plan aims to support, enhance and improve coordination of these efforts.

Water supply planning is coordinated through the North Coast Integrated Regional Water Management Plan, Urban Water Management Plans prepared by urban water suppliers every five years, a Water Supply Strategies Action Plan prepared by the Water Agency, and other activities.

Water conservation programs in the Plan Area are implemented by a number of regional and local efforts to help meet the statewide goal of reducing per capita water use 20 percent by 2020, with an interim goal of a 10 percent reduction by 2015. This includes Sonoma-Marin Saving Water Partnership, water efficient landscape ordinances in each city and the County, and resources for implementing rural and agricultural water conservation.

Water reuse currently occurs at many scales throughout the Plan Area, including programs for distributing large-scale, highly treated municipal recycled water. Examples include the Santa Rosa Subregional Water Reuse System (Subregional System), small-scale winery water reuse systems, and graywater systems installed by individual property owners.

Stormwater management activities in the Plan Area are implemented in a variety of approaches to reduce pollutants in stormwater and better protect local waterways. The Water Agency, Sonoma County, and City of Santa Rosa are co-permittees under a municipal stormwater permit, which incorporates public outreach, monitoring and detection, and good housekeeping as key elements.

Water quality programs within the Plan Area largely derive from the state's Porter-Cologne Act, which gives responsibility for protecting and enhancing California's surface water and groundwater quality to the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards. For example, the 2013 Santa Rosa Plain Salt and Nutrient Management Plan identifies salt and nutrient sources, the potential for impacts to groundwater from excess amounts, and a long-term monitoring plan.

Well Permitting is conducted by the Sonoma County Permit and Resource Management Department (PRMD), the responsible local agency within the unincorporated areas of the Plan Area. Permits are issued under the County's Well Ordinance, which ensures that new water wells are built to appropriate standards to avoid groundwater contamination and provide a safe water supply. PRMD also reviews all major development proposals within unincorporated areas that will rely on wells for water supply.

Monitoring of both groundwater levels and groundwater quality is conducted by numerous organizations, including: the State Department of Water Resources (DWR), the Water Agency, Cities of Cotati, Rohnert Park, Santa Rosa, and Sebastopol; Town of Windsor, California American Water Company, Sonoma State University, and small mutual water systems. PRMD also collects groundwater level data on certain commercial and high-capacity water wells.

Land Use Planning activities are conducted by each city and by the County. Land use plans directly or indirectly link with water supply and groundwater management. The County and all of the cities develop and adopt comprehensive general plans to guide future local physical development, as required by California law.

Plan Goal, Basin Management Objectives and Management Components

Early in the planning process, the Panel identified the goal for the Santa Rosa Plain Groundwater Management Plan. The Plan's goal is for ***a balanced group of stakeholders to locally manage and protect groundwater resources through non-regulatory measures to support all beneficial uses, including human, agriculture, and ecosystems, in an environmentally sound, economical, and equitable manner for present and future generations***.

The Panel also established eighteen Basin Management Objectives (also known as BMOs) that are the measurable accomplishments necessary to meet the overall goal. The Plan also includes management actions to achieve the objectives. Panel members developed the BMOs and management actions through an iterative and collaborative process, including

outreach to the community and stakeholder constituencies for input and feedback. The BMOs and management actions are grouped into seven management components, described below.

Management Component #1: Stakeholder Involvement and Public Awareness

A successful Groundwater Management Plan requires the cooperation and participation of a variety of stakeholders. In fact, broad participation is required under the California Water Code. The Plan calls for continuing participation by the stakeholder Panel to disseminate educational information and improve public and stakeholder awareness of water supplies and management issues. The Panel will also help secure local support of the plan, and continue its collaborative and inclusive process for addressing future challenges during program implementation. All Panel meetings are open to the public.

Basin Management Objectives	Actions to Meet Objectives
BMO-1 Public Information Accessibility and Forums **BMO-2** Increase Public Water Awareness	• Involve the Public • Hold regular Advisory Group meetings • Inform Stakeholders & Public Agencies • Develop Partnerships & Coordinate

Management Component #2: Monitoring & Modeling Program

The Panel has identified monitoring and modeling as key tools for assessing Plan Area water resources and proposed projects, and planning for various climate scenarios. The Plan will provide consistent and ongoing comprehensive monitoring programs, data collection and management, and analytical tools.

Basin Management Objectives	Actions to Meet Objectives
BMO-3 Maintain and Protect Groundwater Elevations **BMO-4** Maintain and Protect Surface Water-Groundwater Interaction **BMO-5** Maintain and Protect Water Quality **BMO-6** Protect Against Land Subsidence **BMO-7** Monitor Rainfall **BMO-8** Maintain and Update the Model	• Monitor Groundwater Levels • Monitor Groundwater Quality • Monitor Land Subsidence • Monitor Interaction of Surface Water and Groundwater • Monitor Hydrometeorological Conditions • Maintain Monitoring and Reporting Protocols • Manage and Analyze Data • Model Groundwater Conditions

Management Component #3: Groundwater Protection

Protecting groundwater quantity and quality for future beneficial uses is essential. Improperly located or conducted land use activities can degrade water quality and constructed hardscapes (roofs and pavements) can impede percolation and increase runoff. The Plan aims to manage for groundwater protection.

Basin Management Objectives	Actions to Meet Objectives
BMO-9 Recharge Area Protection **BMO-10** Wells and Groundwater Protection	• Maintain Groundwater Levels • Prevent Adverse Interactions Between Surface Water and Groundwater • Ensure Proper Well Construction, Maintenance, Protection, Abandonment and Destruction • Map and Protect Groundwater Recharge Areas • Evaluate Distribution and Remediation of Contaminated Groundwater • Identify and Provide Information to the Public on Groundwater Protection

Management Component #4: Increase Water Conservation and Efficiency
The Plan emphasizes improved water conservation, and water and energy efficiency practices and approaches, which contribute substantially to reducing water demands and wastewater volumes, thus increasing water supply reliability.

Basin Management Objectives	Actions to Meet Objectives
BMO-11 Increase Water Conservation & Efficiency	• Continue and Increase Best Management Practices (BMPs) for Urban Water Conservation • Voluntary Water Conservation BMPs for Unincorporated Areas

Management Component #5: Increase Groundwater Recharge
To ensure a long-term, viable and sustainable supply of groundwater, the Plan seeks to increase the amount of groundwater recharge ("managed aquifer recharge") in the Plan Area over the long term. Managed aquifer recharge can be accomplished through a number of options that would entail site-specific studies and build on the previously completed Groundwater Banking Feasibility Study (2013), and Stormwater Management/Groundwater Recharge Scoping Study (2012).

Basin Management Objectives	Actions to Meet Objectives
BMO-12 Recharge Enhancement	• Implement pilot-scale and full-scale recharge projects and studies • Surface Water Use In Lieu of Groundwater • Low Impact Development in New Construction

Management Component #6: Increase Water Reuse
The Plan recognizes appropriately-sited water reuse (i.e., treated recycled wastewater) as an important tool for reducing irrigation demands on groundwater. Recycled water is already applied throughout the Plan Area, ranging from large-scale municipal recycled water programs to individual graywater systems. The Plan aims to promote as much responsible reuse of water as possible.

Basin Management Objectives	Actions to Meet Objectives
BMO-13 Increase Water Reuse	• Increase Recycled Water for Agricultural Irrigation Where Appropriate • Increase Recycled Water for Landscape Irrigation Where Appropriate • Promote Graywater for Domestic Landscape Irrigation

Management Component #7: Integrated Groundwater Management

Integrated water planning and management recognizes the connections between groundwater and all watershed components, including rivers, wetlands, forests and other ecosystems, surface water, and groundwater users. Integrated groundwater management considers the effect of groundwater use on surface waters, land uses, and the natural ecosystems in a changing climate, as well as considering how surface water changes may impact groundwater supplies.

Basin Management Objectives	Actions to Meet Objectives
BMO-14 Interagency Coordination and Partnerships **BMO-15** Conjunctive Management **BMO-16** Water-Land Use Planning **BMO-17** Urban-Rural Shared Stewardship **BMO-18** Climate Change Planning	• Coordinate Groundwater Management and Land Use Planning • Monitor and Track UWMP Progress and Incorporate Revisions into Plan Updates • Incorporate Multi-Agency and -Organization Integration into Plan • Plan for Climate Change • Encourage Multi-Benefit Actions and Activities

Groundwater Management Plan Implementation

Plan Implementation is structured to encourage an open, collaborative and cooperative process for groundwater management activities, and to maximize coordination of the many future actions envisioned by the Panel. Studies, projects, and programs conducted under the Plan may be implemented by one or more lead agencies (the Water Agency or other agencies), following input or guidance from the Panel and a supporting Technical Advisory Committee (Figure ES-2).

Plan Funding

Funding for Plan implementation is anticipated from a variety of sources, including the Water Agency, member agencies, state or federal grant programs, and partnerships at the local, state, and federal level. Panel member organizations may also provide in-kind services. Stakeholder Involvement and the Monitoring Program form the Plan's foundation; these are required Plan components under the Water Code and a prerequisite for accessing state funds for groundwater projects.

The Groundwater Protection, Water Conservation, Increase Groundwater Recharge, Water Reuse, and Integrated Water Planning Management components contain many more planned, but unfunded, actions that will require additional study, data collection, feasibility analysis, and design before funding can be obtained. Implementation of many of these

actions, including groundwater banking and stormwater recharge, is probably a minimum of 3 to 5 years in the future, dependent on funding.

Annual Plan Review, Future Implementation and Public Reporting
The Santa Rosa Plain Groundwater Management Plan and its implementation will shape the area's future water supply reliability through an integrated, local, non-regulatory approach to managing groundwater. The eighteen Basin Management Objectives listed above and their accompanying actions have been designed to encourage wide-ranging management activities to proactively and sustainably manage the Santa Rosa Plain's groundwater.

The Plan is a living document that will continually evolve as more information about Santa Rosa Plain Watershed water resources and hydrogeology becomes available. Over time, the Water Agency or Panel may identify additional actions as the Panel continues to evaluate whether the actions are meeting the overall Plan Goal and objectives. The Water Agency will publish annual progress reports to summarize Plan implementation and the groundwater conditions in the Plan Area.

The success of this Plan for the long term will depend on continued participation and involvement of the Plan Area community, as represented by Panel members and the interested public.